PATENT SPECIFIC CIRCULATION MODEL (as amended)
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The paragraph beginning at page 25, line 12:

The use of these data in the three-dimensional phase contrast magnetic resonance (MR) flow measurement system of the invention enhances the accuracy of the cross-section and flow measurements by three-dimensional localization and visualization of the vessels. Microfiche Appendix A is a copy of the three-dimensional phase contrast magnetic resonance flow measurement system and three-dimensional pulsatility visualization system program.

The paragraph beginning at page 36, line 15:

The computer model is a one-dimensional, explicit, finite-difference algorithm based on a conservation of mass equation, a Navier-Stokes momentum equation, and an equation of state releating local pressure to local size of artery applied at each vessel segment [Kufahl & Clark, *ASME J. of Biomech. Eng.* 107:112-122 (1985)]. Microfiche Appendix B is a copy of the current computer model program. FIG. 29 is a flow chart of the modeling program.

The paragraph beginning at page 36, line 18:

Since the arterial networks contain vessel loops (as well as many branchings), the pressure and flow nodes are staggered throughout the model. Each vessel is divided into many segments; the flow nodes are located at segment ends, the pressure nodes at segment centers. Any multi-vessel network configuration can be specified solely from the data file. Microfiche Appendix C is a sample data file with the computer parameters for a typical human model.